| | | *Titan.* | | *Iapetus.* | |
|---|---|---|---|---|---|
| $0^h$ Gr. | | $\alpha-A$ s | $\delta-D$ " | $\alpha-A$ s | $\delta-D$ " |
| 1883, Mar. | 15 | − 8·42 | −52·3 | 32·78 | 78·2 |
| | 16 | − 4·52 | −65·3 | 33·21 | 91·3 |
| | 17 | + 0·04 | −68·7 | 33·42 | 103·9 |
| | 18 | + 4·59 | −62·2 | 33·42 | 115·6 |
| | 19 | + 8·47 | −47·0 | 33·19 | 126·7 |
| | 20 | +11·18 | −25·2 | 32·76 | 136·9 |
| | 21 | +12·29 | + 0·1 | 32·11 | 146·1 |
| | 22 | +11·65 | +25·3 | 31·25 | 154·4 |
| | 23 | + 9·31 | +46·8 | 30·19 | 161·7 |
| | 24 | + 5·56 | +61·2 | 28·94 | 167·9 |
| | 25 | + 0·95 | +66·0 | 27·50 | 173·0 |
| | 26 | − 3·79 | +60·0 | 25·88 | 176·9 |
| | 27 | − 7·90 | +44·2 | 24·10 | 179·7 |
| | 28 | −10·70 | +21·1 | 22·17 | 181·3 |
| | 29 | −11·74 | − 5·5 | 20·10 | 181·7 |
| | 30 | −10·88 | −31·3 | −17·90 | −181·0 |

## *Observations of Comet a* 1882. By E. J. Stone, Esq.

The following is the series of observations of Comet *a*, 1882, made with the Transit-Circle of the Radcliffe Observatory, Oxford, when passing *sub polo*:—

| Ref. | Day. | G.M.T. | Observed R.A. | Observed N.P.D. (uncorrected for Parallax) | Obs. |
|---|---|---|---|---|---|
| | 1882 | h m s | h m s | ° ′ ″ | |
| (*a*) | May 12 | 8 57 20·13 | 0 14 22·90 | 15 32 53·4 | R. |
| (*b*) | 13 | 9 18 33·31 | 0 39 36·12 | 15 54 2·8 | W. |
| (*c*) | 15 | 9 57 21·31 | 1 26 23·60 | 17 8 33·7 | R. |
| (*d*) | 16 | 10 14 15·71 | 1 47 17·34 | 18 0 13·6 | W. |
| (*e*) | 17 | 10 29 20·28 | 2 6 20·93 | 19 0 10·4 | R. |
| (*f*) | 18 | 10 42 34·30 | 2 23 33·69 | 20 7 31·6 | W. |
| (*g*) | 19 | 10 54 4·86 | 2 39 2·69 | 21 21 18·6 | R. |
| (*h*) | 20 | 11 3 59·82 | 2 52 55·84 | 22 40 44·1 | W. |
| (*i*) | 21 | 11 12 28 | 3 5(21·75) | 24 5(18) | R. |
| (*j*) | 22 | 11 19 38·44 | 3 16 30·14 | 25 33(54) | R. |
| (*k*) | 24 | 11 30 41·92 | 3 35 28·55 | 28 42 28·8 | R. |
| (*l*) | 25 | 11 35 0 | — | 30 21 48·0 | F.B. |
| (*m*) | 26 | 11 38 14·07 | 3 50 55·05 | 32 4 1·2 | R. |
| (*n*) | 27 | 11 40 54·82 | 3 57 32·80 | 33 49 7·1 | W. |
| (*o*) | 29 | 11 44 34·11 | 4 9 5·80 | 37 27 44·1 | R. |
| (*p*) | 31 | 11 46 21·43 | 4 18 46·53 | 41 18 26·7 | R. |

*Observers' Notes*:—

(*a*), (*b*) Very faint, but observations fair. (*c*) Very faint at times; observation fair on the whole. (*d*) Nucleus sometimes showed as a bright point, but generally not well defined, and would scarcely stand any illumination of field. Observation, though difficult, very fair. (*e*) Observation good. (*f*) Observation considered very good. Nucleus very sharp at times. (*g*) Difficult, but considered fairly good. Nucleus faint at times. (*h*) Faint. Observation good. (*i*) Observation only approximate. Sky cloudy. (*j*) R.A. good. N.P.D. very rough from a single bisection when extremely faint.

*General Notes* (*a*) to (*j*).—In the telescope, the light of the head on the night of May 18, the nucleus being better defined than on any other night when the observations were made by me, was certainly not brighter than an eighth magnitude star (W.)

Brightness = Eight in star-magnitude (R.) May 21 and 22, cloudy.

(*k*) Difficult observation, but considered fairly good. Clouds passing. $7\frac{1}{2}$ star-magnitude.

(*l*) The comet was as bright as a 7 or $7\frac{1}{2}$ magnitude star, but cloud prevailed nearly the whole time of the transit: only one bisection made.

(*m*) Observation pretty good. As bright (in telescope) as a 7–6 mag. star.

(*n*) Observation very satisfactory. Nucleus a bright point equal to $6\frac{1}{3}$ star-magnitude.

(*o*) Observation good. Brightness in star-magnitude = 6–5. *Note*.—May 29, $13^h$. The comet and tail are both visible with the naked eye.

(*p*) Very good observation. Brightness in telescope = $4\frac{1}{2}$ mag. Note at $10\frac{1}{2}^h$.—Compared comet with stars near for magnitude, and found it (to the naked eye) identical in brightness with δ Persei = 3rd magnitude. Observers—W. = Mr. Wickham. R. = Mr. Robinson. F.B. = Mr. F. Bellamy.

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## *Observation of Comet a* 1882. By L. G. Puckle, Esq.

(*Communicated by Capt. H. Toynbee, R.N.*)

On Friday, June 23, at $7^h\ 20^m$ P.M., the ship being in latitude 2° 30′ N., and longitude 104° 33′ E., we observed a large comet a little to the southward of the planet *Venus*.

The following angles were observed with a sextant:—

| | ° | ′ | ″ |
|---|---|---|---|
| Altitude of *Venus* ... ... ... | 13 | 30 | 0 |
| Altitude of nucleus of comet ... | 12 | 0 | 0 |
| Angle between nucleus and *Venus* ... | 6 | 30 | 0 |